

Rutgers University
Edward J. Bloustein School of Planning & Public Policy
International Development Planning Studio

Planning for Global Population ageing

Final Presentation to:
Economic Analysis and Policy Division
United Nations Department of Economic and Social Affairs

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**United
Nations**

Department of Economic and
Social Affairs



RUTGERS

Edward J. Bloustein School
of Planning and Public Policy

Advised by
Dr. Hal Salzman

Graduate Researchers

Astha Negi

Brane Gradina

Dillan Patel

Liliana Ordonez

Lydia Zoe

Richa Rashmi

Shi Chen

Smriti

Xuedi Yan



Key Topics

- **Economic production**: The untapped potential of longevity economy
- **Education**: Inclusive and lifelong learning as an intergenerational solidarity strategy
- **Consumption**: Alternatives to increase public finance
- **Pension** planning: Personal consumption and productivity policies
- **Healthcare**: *Cost avoidance vs. Cost reduction* preventive, age-friendly infrastructure, reducing climate change vulnerability



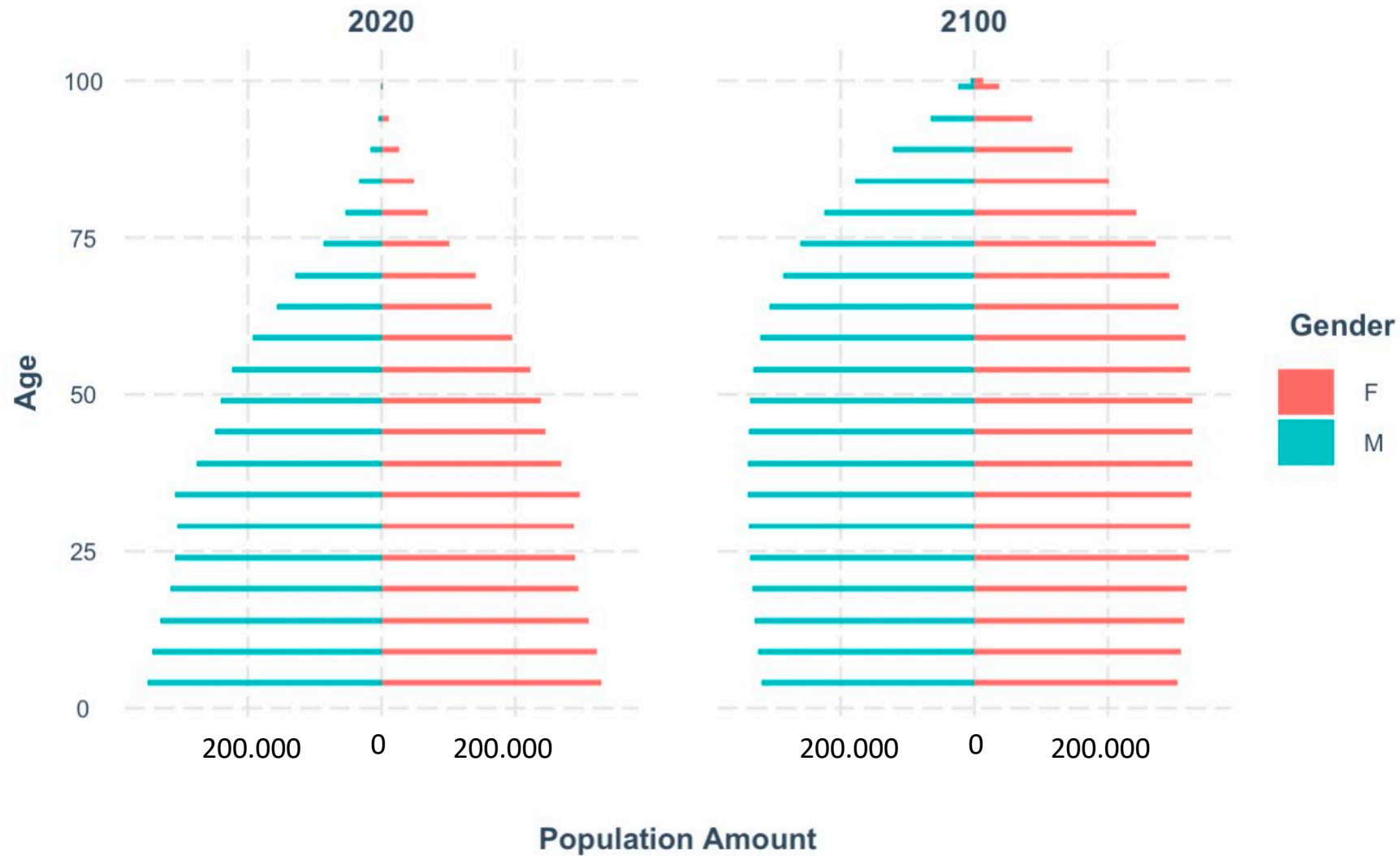
Introduction: Demographic Trends

Liliana Ordóñez



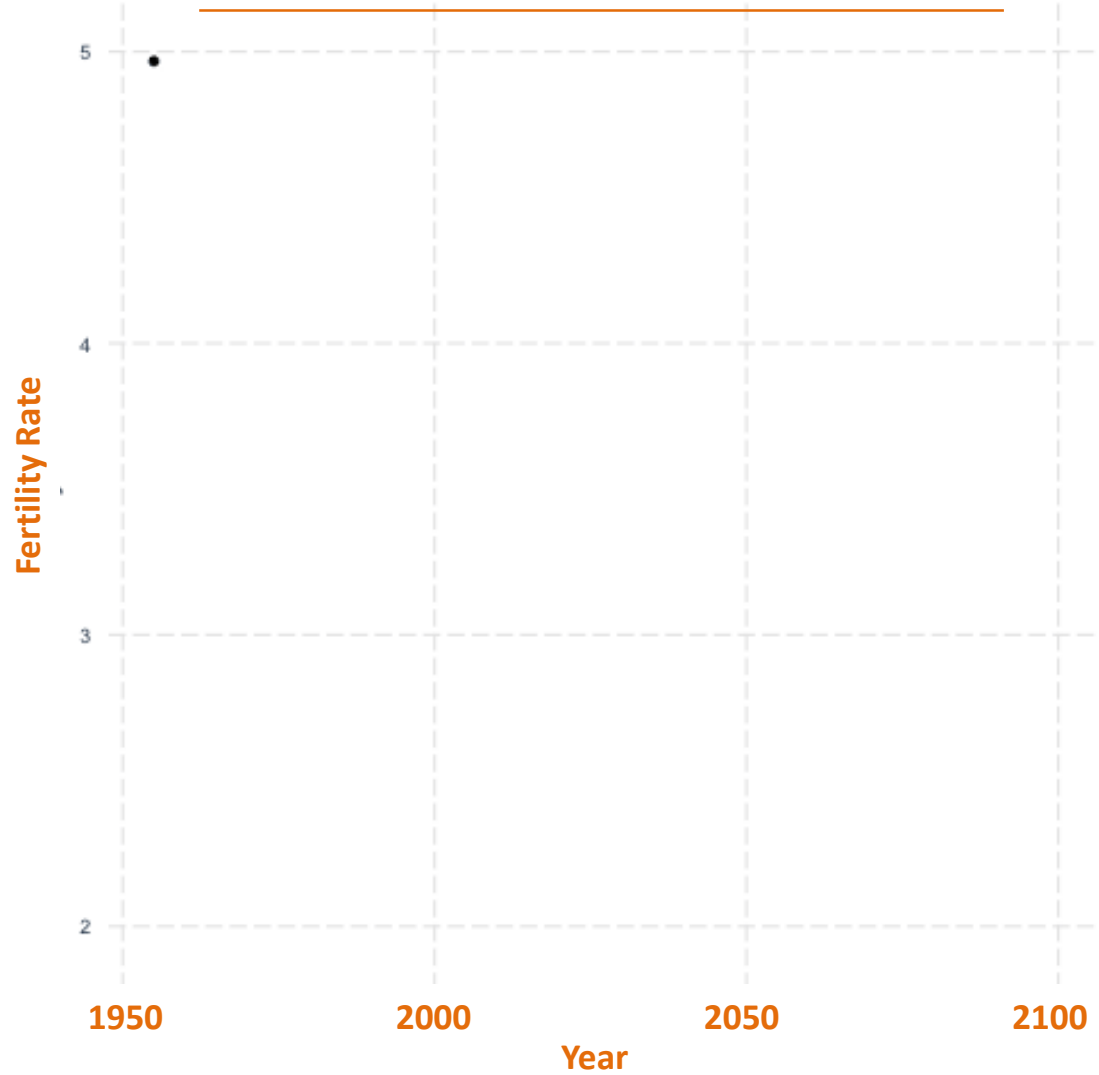
The World's Population is Ageing:

We are at a turning point in global population history

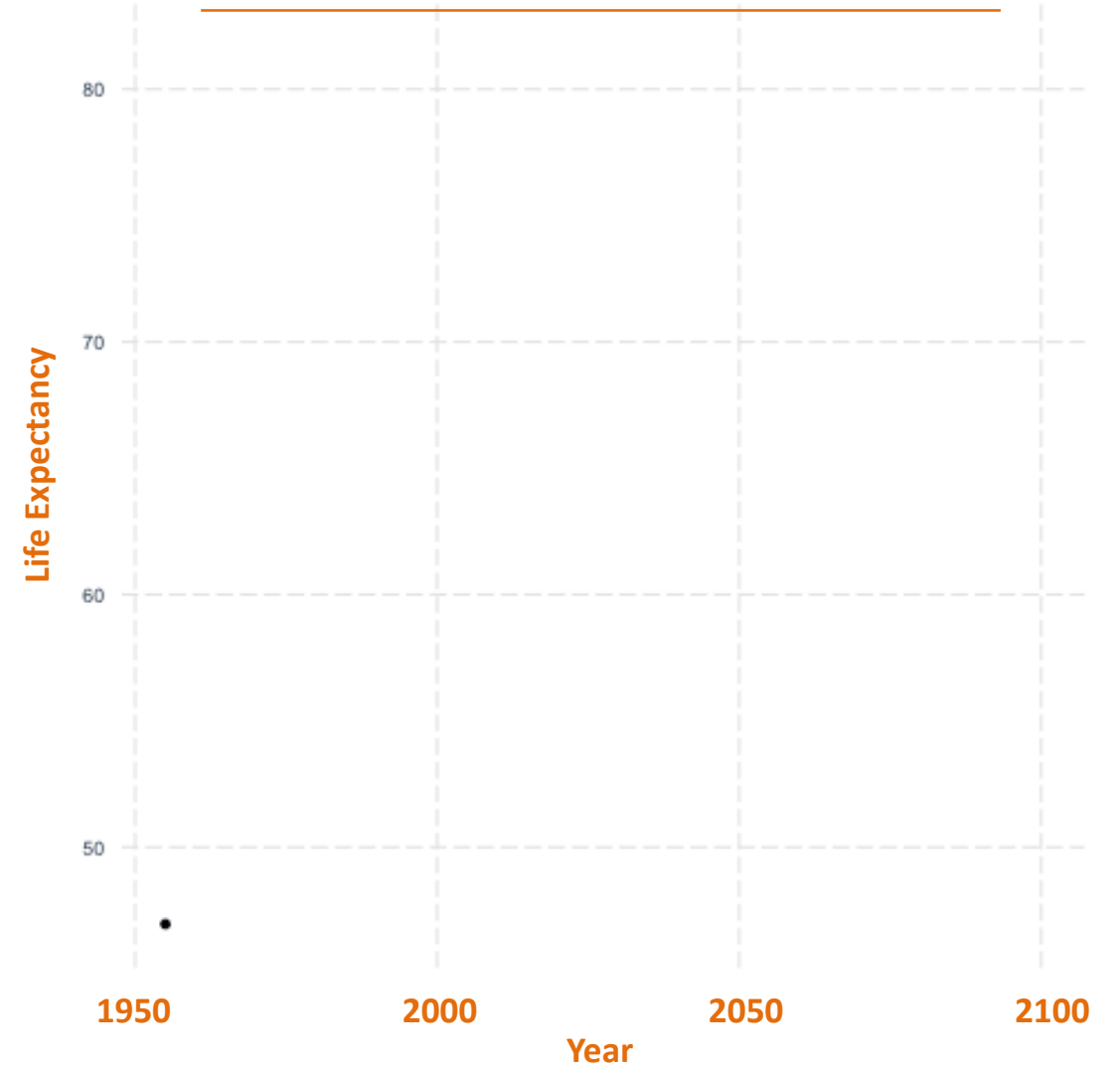


Fertility Rate is decreasing, while Life Expectancy is increasing

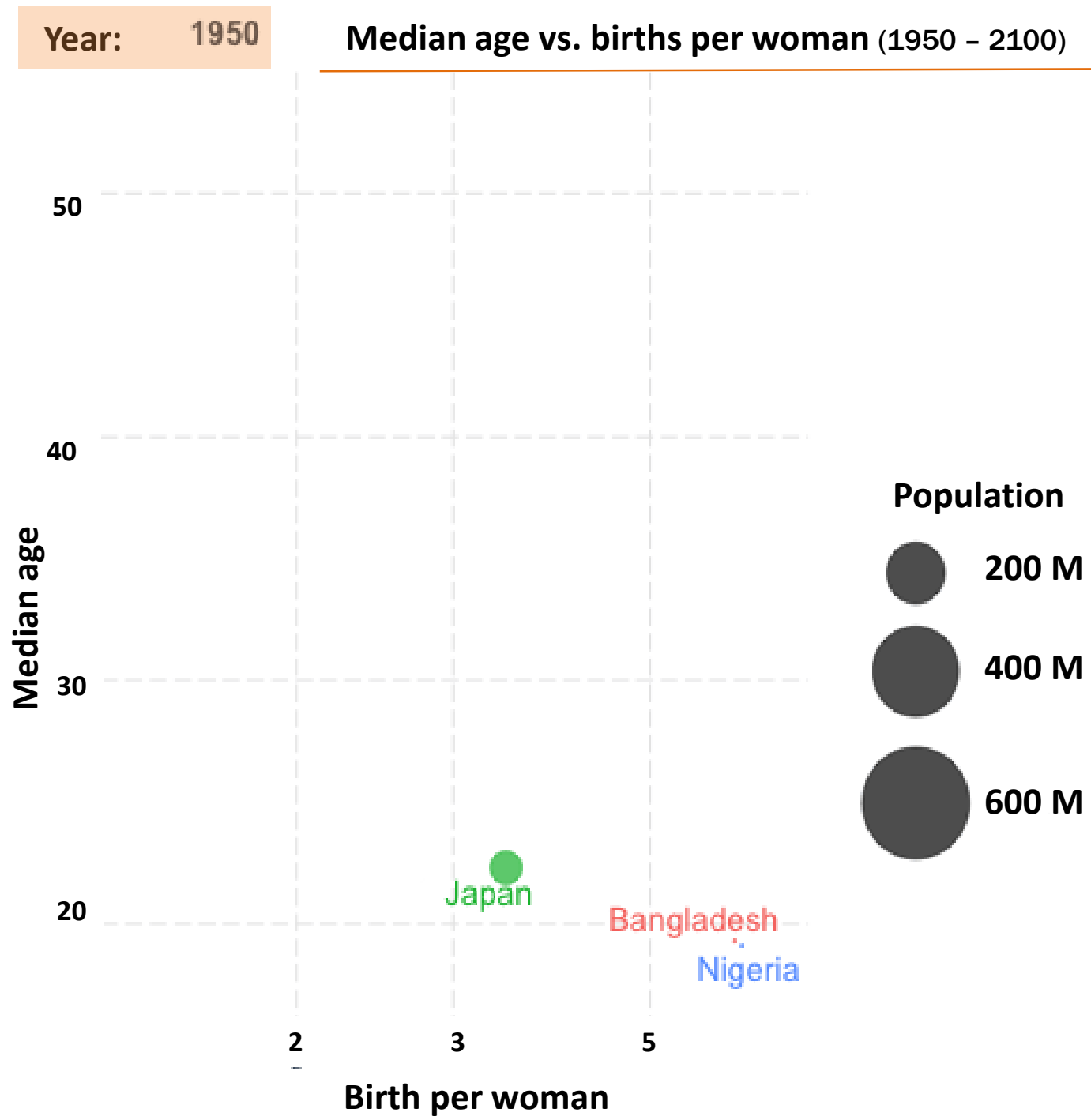
World's Fertility Rate (1950 - 2100)



World's Life Expectancy (1950 - 2100)



Bangladesh, Nigeria, and Japan are ageing in different ways

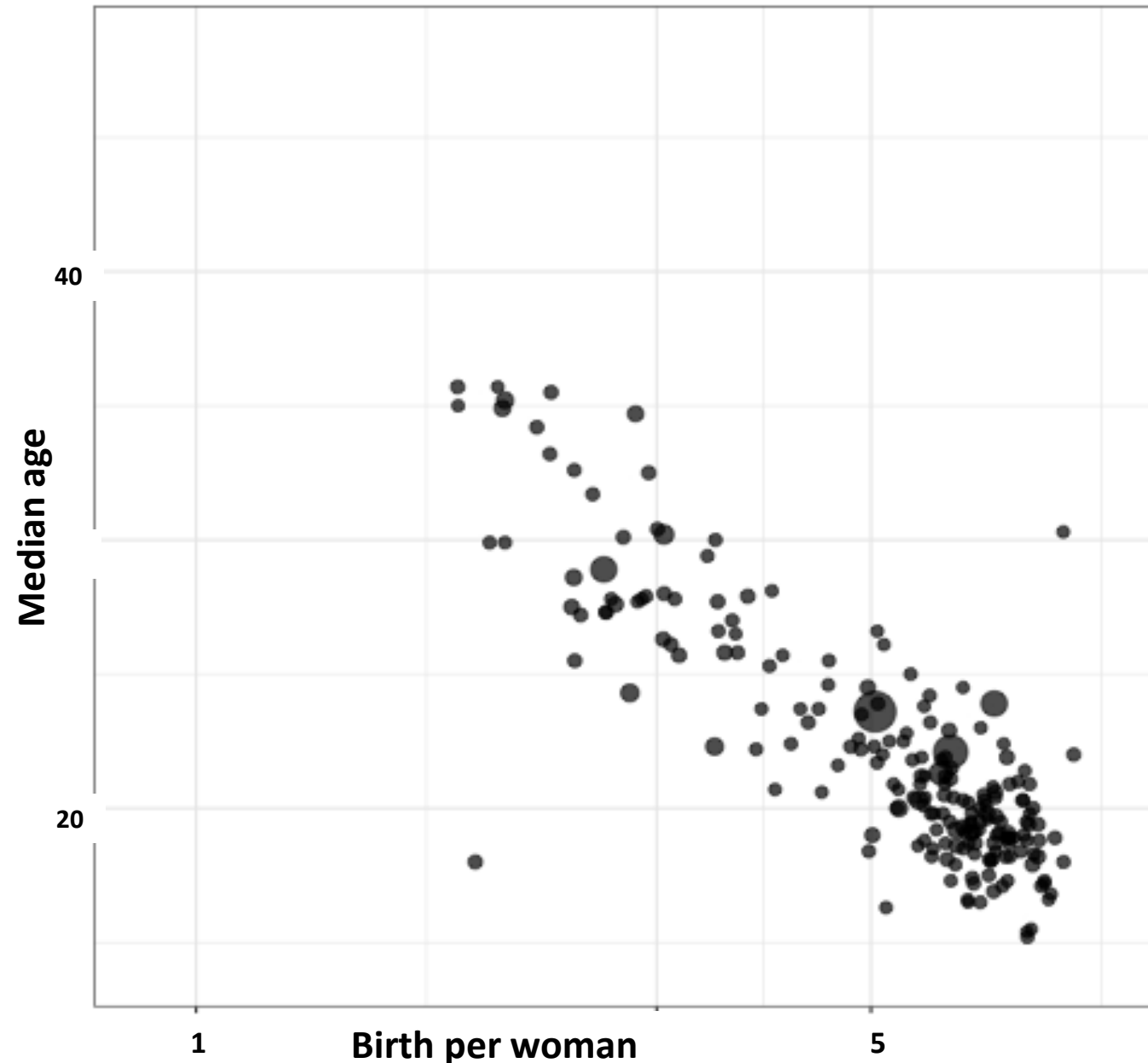


Although every country in the world is following the same path in terms of ageing,

Each country is at a different stage of demographic transition

Median age vs. births per woman by country (1950 - 2020)

Year: 1950





Economic Production

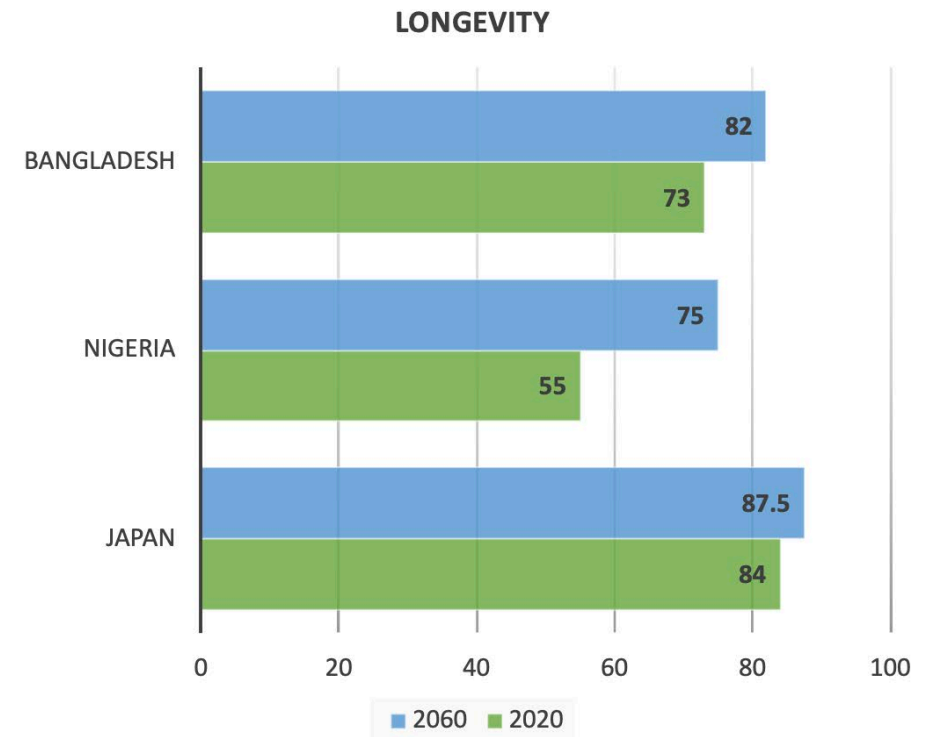
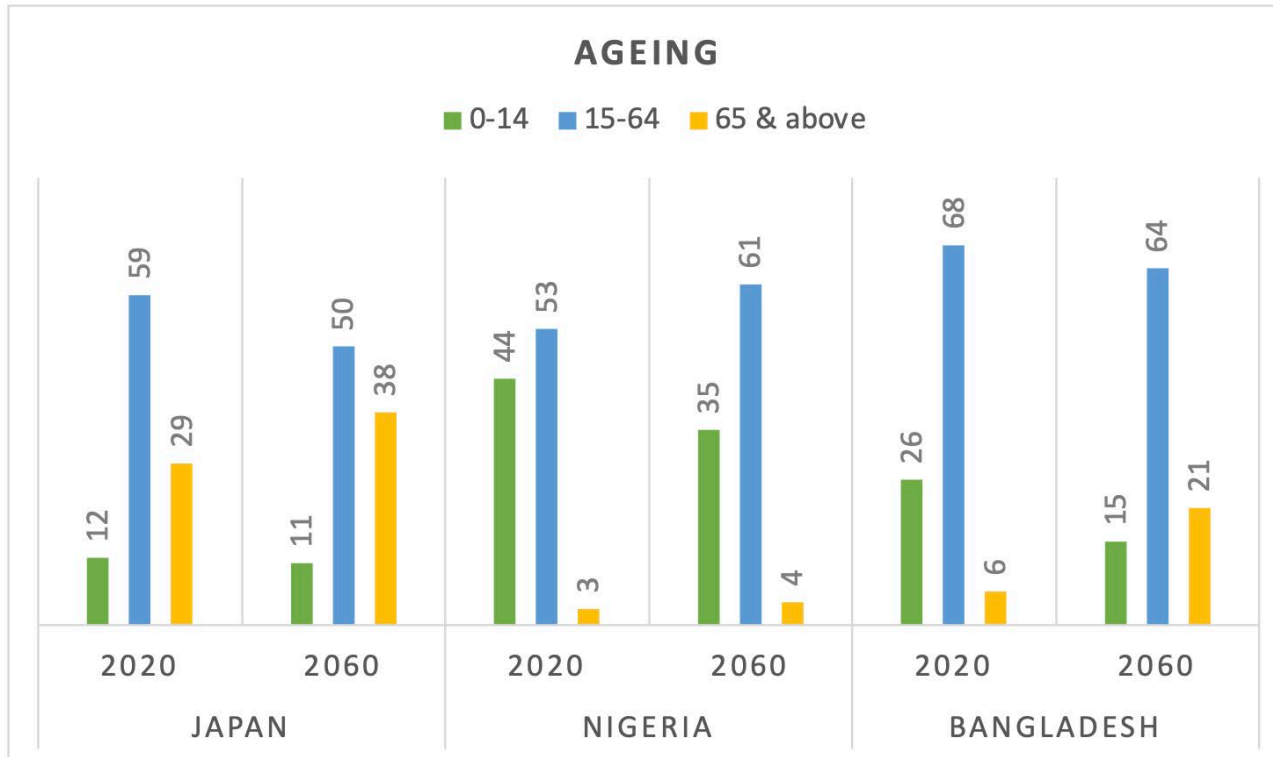
How can ageing nations maintain
economic growth and social
cohesion?

Richa Rashmi



Country Comparison

	Japan	Nigeria	Bangladesh
Employment Rate	60%	24%	37%
Productivity	High, Declining	Low	Low



ECONOMIC

Challenges	Opportunity	Policy Recommendation		
		<i>Mitigation</i>	<i>Caveat</i>	<i>Solution</i>
Gains at economically inactive age characterized by poor health	Focus on LONGEVITY (rather than ageing)	<ul style="list-style-type: none"> • Delayed Retirement • Set targets for healthy ageing 	<ul style="list-style-type: none"> • Skill obsolescence • Rise in lifestyle diseases 	<ul style="list-style-type: none"> • Lifelong learning • Preventive health

SOCIAL



INDUSTRIAL MIX

Japan: Healthcare, Robotics & Automation
Bangladesh: upscale RMG industry
Nigeria: Agro-based industries & Construction

PRODUCTIVITY GAINS

Japan: Bridge technology divide between firms
Bangladesh: Improve technology penetration
Nigeria: Technological modernization

WORK DIVERSIFICATION

Japan: Flexible immigration, reskilling workforce
Bangladesh: Reduce underemployment, educate & upskill
Nigeria: Increase contingent jobs, educate & embed digital skilling

03

02

01



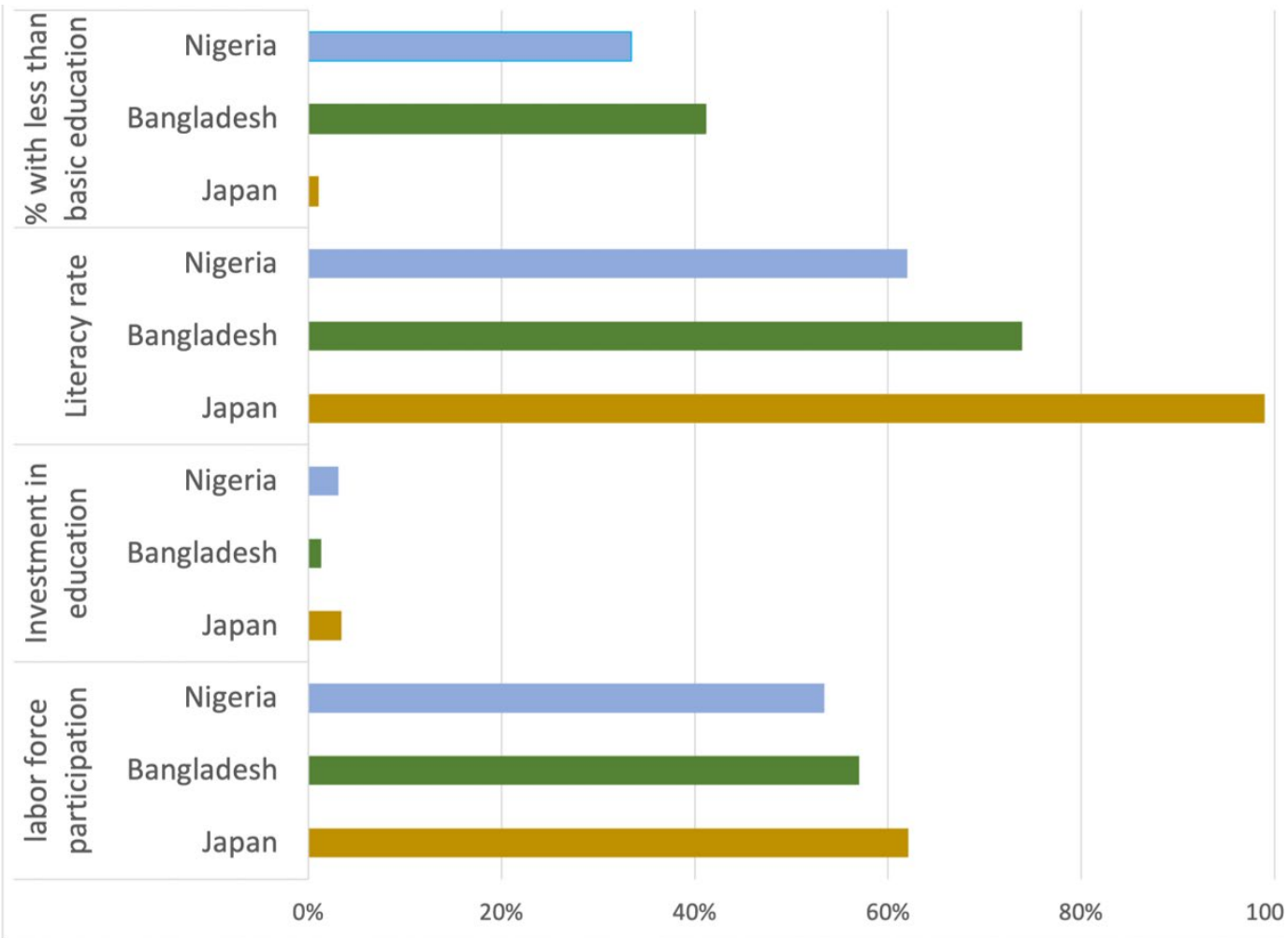
Education, Skills and gender

What are the barriers in accessing education? How can the female work force participation increase?

Smriti



Country Findings



Universal access to basic education. 46% of 45-54 year-old and 32% of 55-64 **year-old** have tertiary education, significantly higher than the OECD average (29% and 24%, respectively)

Japan

Bangladesh did great in SDG 4-1 – access to primary education . Unemployment rates were found the highest for those with higher secondary education (15 percent) and those with tertiary degrees (11 percent).

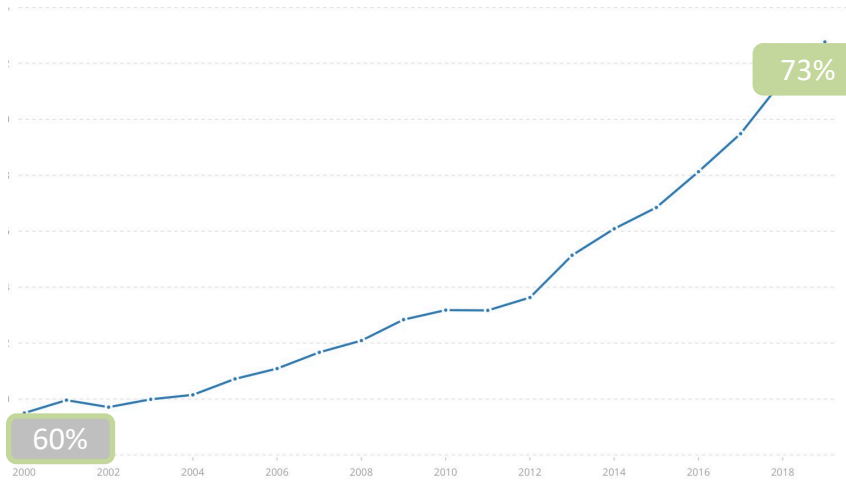
Bangladesh

One in every five of the world's out-of-school children is in Nigeria. More than half of the women are not in school in the northern part of Nigeria. Internal insurgencies one of the barriers in accessing education

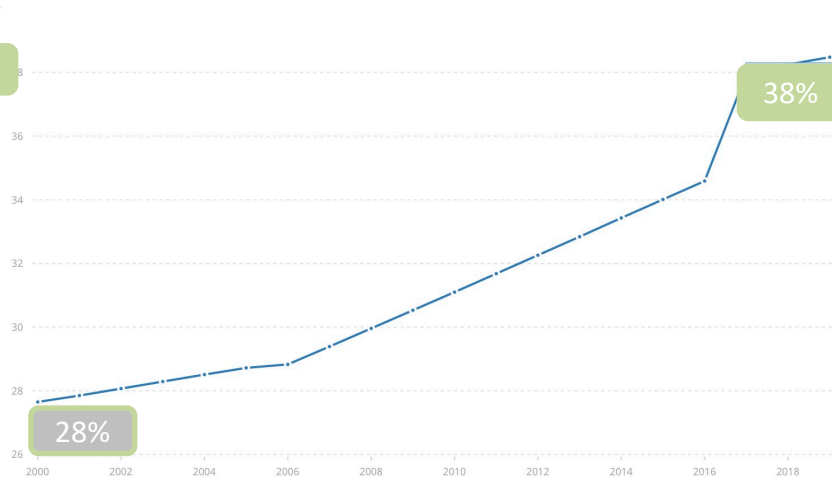
Nigeria

Labor force participation rate, female (% of female population ages 15-64) (modeled ILO estimate) (2000-2019)

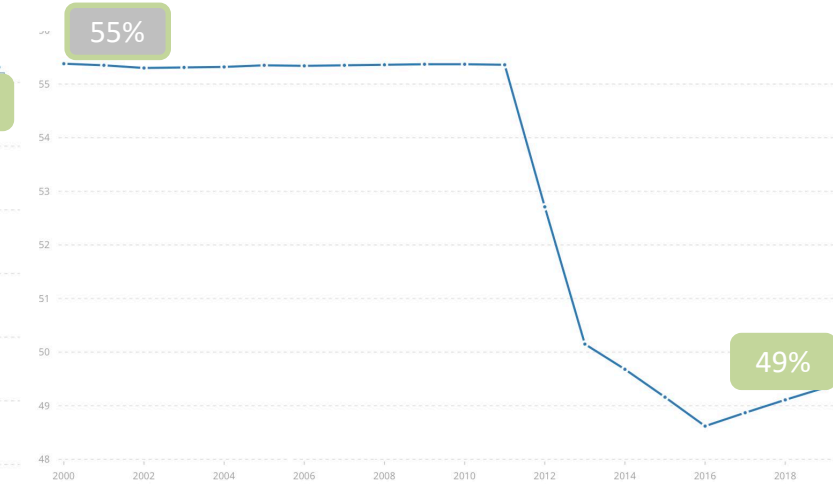
Japan



Bangladesh



Nigeria



38% of working women are self-employed or family workers - part time and relatively low paid. Gender wage gap third-worst among developed countries (24.5%). Male biased work spaces and cultural setback.

Less than half of the women employed. Mostly in informal sector. Making public spaces and travel more female-friendly; and female work more socially acceptable important for FLFP

Decline in FLFP. Marital status, religion, income, education and internal conflicts are significant determinants.

Challenges

Opportunities

Japan

Meeting social security–related obligations while maintaining a sustainable fiscal position.

Innovative curriculum & skill development programs for different age groups and ensuring flexible and inclusive employment

Bangladesh

Less service sector jobs, majority employed in low-paying, low-productivity informal sector.

Focus on job creation and tandem between industry requirement and skill development programs

Nigeria

Overall low literacy rate, lack of institutional capacity and political will.

Creating institutions, and bridging the urban rural gap; investment in education, skill development and health

Key takeaways

- Diverse skill development and inclusive employment for women and elderly in Japan; enhanced focus on secondary and tertiary education in Bangladesh and Nigeria.
- Employment generation for the abundant youth.
- Women's access to education, employment and social infrastructure like childcare, water and sanitation facilities.



Household Consumption

Astha Negi

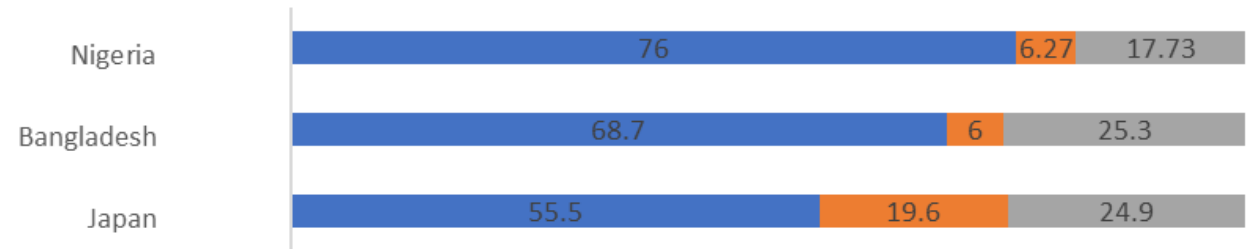


Consumption

Household consumption and its impact

Consumption percent in GDP

- Household consumption percentage in GDP
- Government consumption percentage in GDP
- Other GDP shares like investments and exports



Japan

Household consumption 2,805,092 million US dollars

GDP \$4971 billion

Challenges

- ageing population, Low fertility rate, Less Immigration

Bangladesh

Household consumption 225,536 million US dollars

GDP \$274 billion

Challenges

- Low employment, Low Literacy

Nigeria

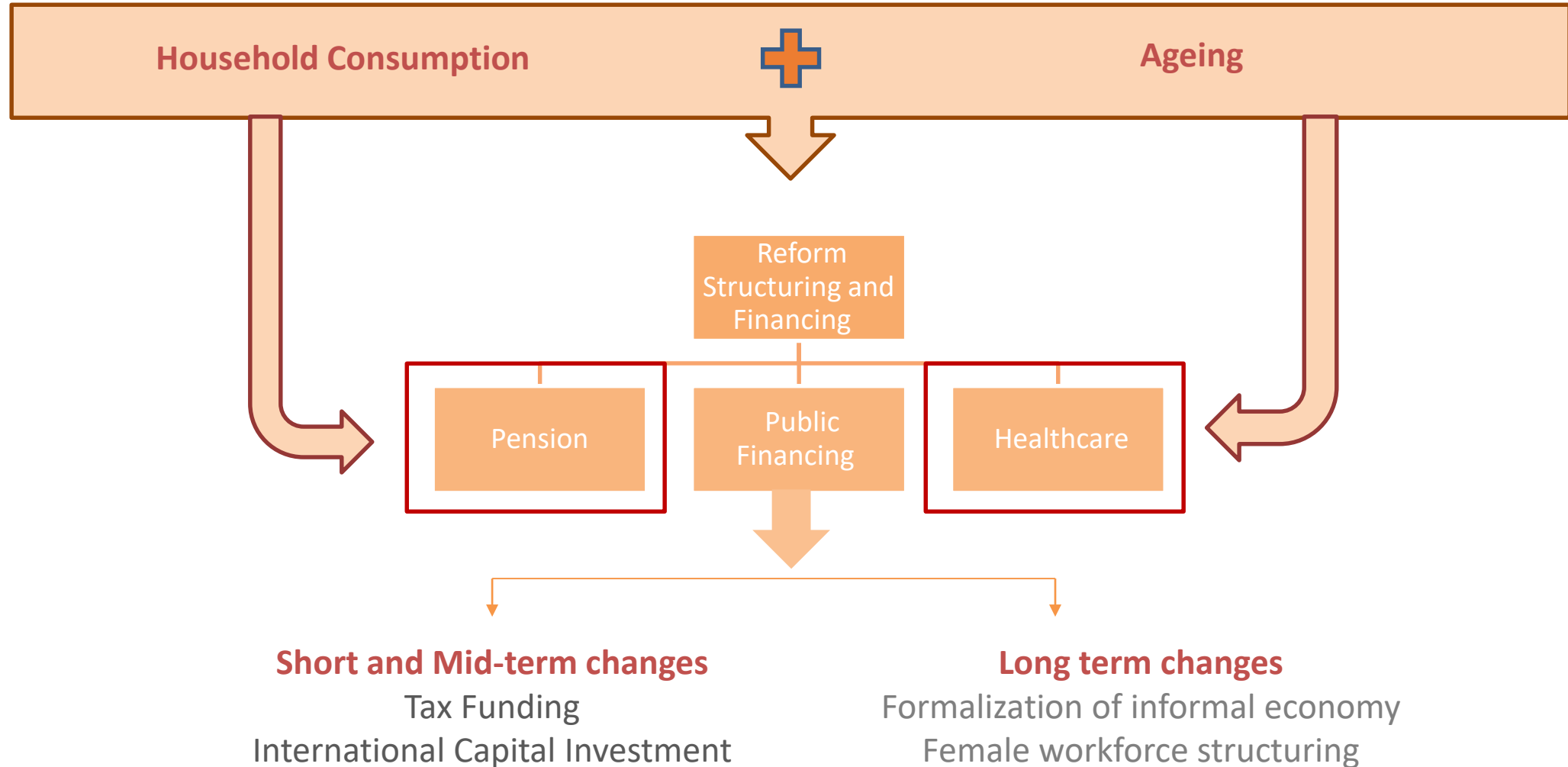
Household consumption 254.718000 million US dollars

GDP \$397.3 billion

Challenges

- Low employment, Low Literacy

Consumption



Consumption

Tax Funding Avenues

Bangladesh



Short and Mid-term

Climate Taxes
VAT Taxes

Long term

Textile and footwear
industry tax

Nigeria



Short and Mid-term

Climate Taxes
VAT Taxes

Long term

Mineral Fuel tax
Oilseed and cocoa
industry taxes

Foreign Direct Investment

Bangladesh



Sectors

- Gas and Petroleum
- Agriculture industry
related production and
manufacturing- Cocoa,
Oilseed.
- Textile and Wearing

Nigeria



Sectors

- Telecommunication
- Textile and Wearing
- Power
- Gas and Petroleum

Consumption

Key Takeaway

Short term

1 Large household consumption GDP share

Mitigate Financial Volatility

The GDP share move away from household income to public financing options like Tax and FDI investment.

Long term

2 Burden on healthcare and pension sector

Stabilize future priority sectors

Prioritize stabilizing the two sectors.

3 Lowering fertility rate

Accommodate Demographic Change

Increase investment challenges on female employment and healthcare.



Pensions

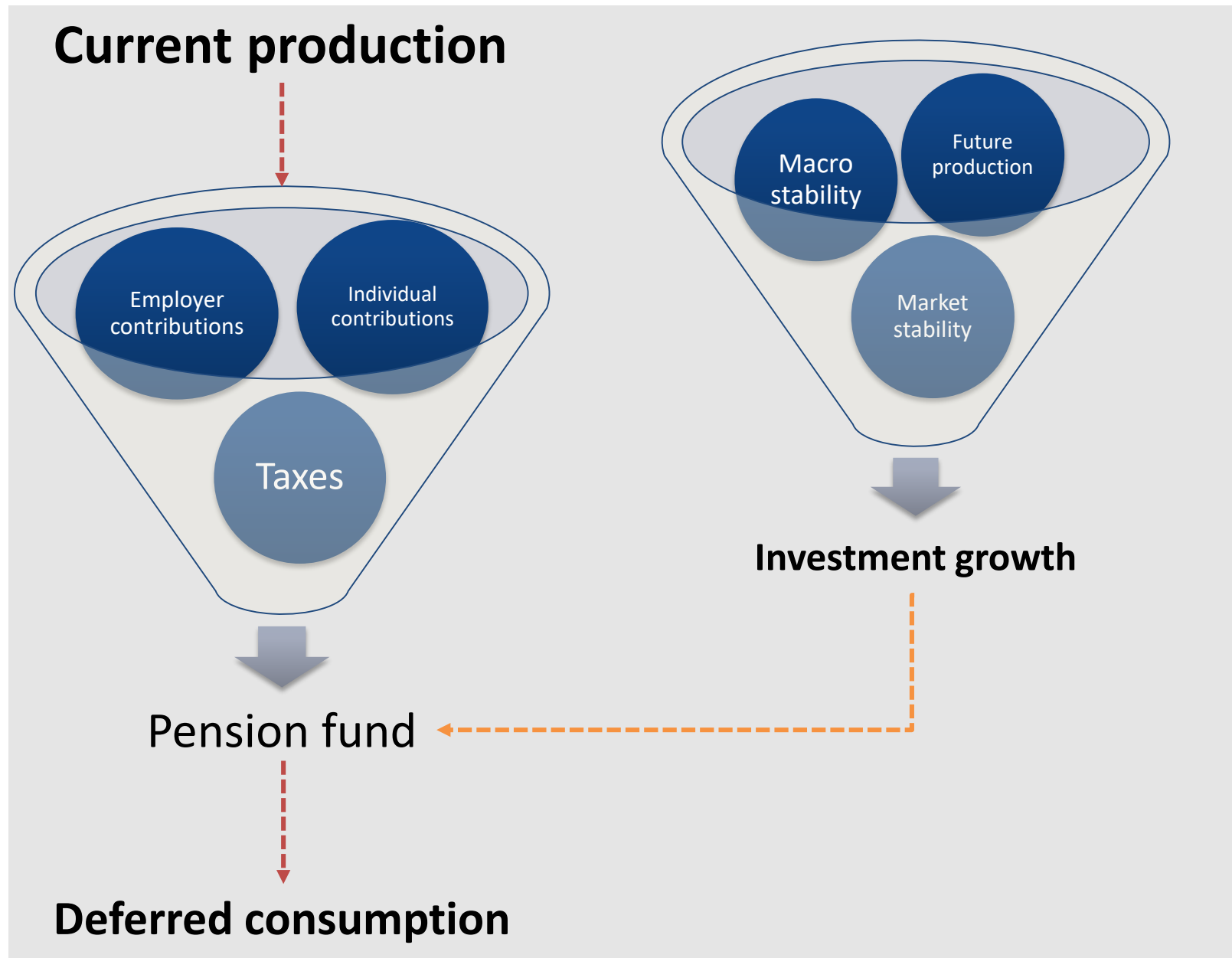
How to fund and by whom:
production and consumption
approach

Dillan Patel



Who pays?

Layered pension system distributes funding burden between households, companies, and governments.



What are the issues?

- Universal pensions address coverage gap (BGD)
- Micro-pensions provide access to informal workers (NGA)
- Investment funds increase fiscal sustainability (JPN)

Sustainable growth

- Pension funds need stable, long-term returns

Intergenerational equity

- PAYG systems imply higher taxes for working population

Disposable Income

- Need to raise real wages, offer tax credits or subsidies

Gender

- Women tend to make more career breaks and contribute less

Economic complexity

- Lower income countries need to increase coverage and adequacy

Risk Sharing

- Contributions from different economic actors (through tiered pension system) increases financial resiliency

Pensions: takeaways



Short term: reality

- Increase flexibility
- Tax incentives
- Increase retirement age



Long term: normative goals

- Productivity growth
- Pillar system
- Formalization



Continuous social and economic investment

ALWAYS!



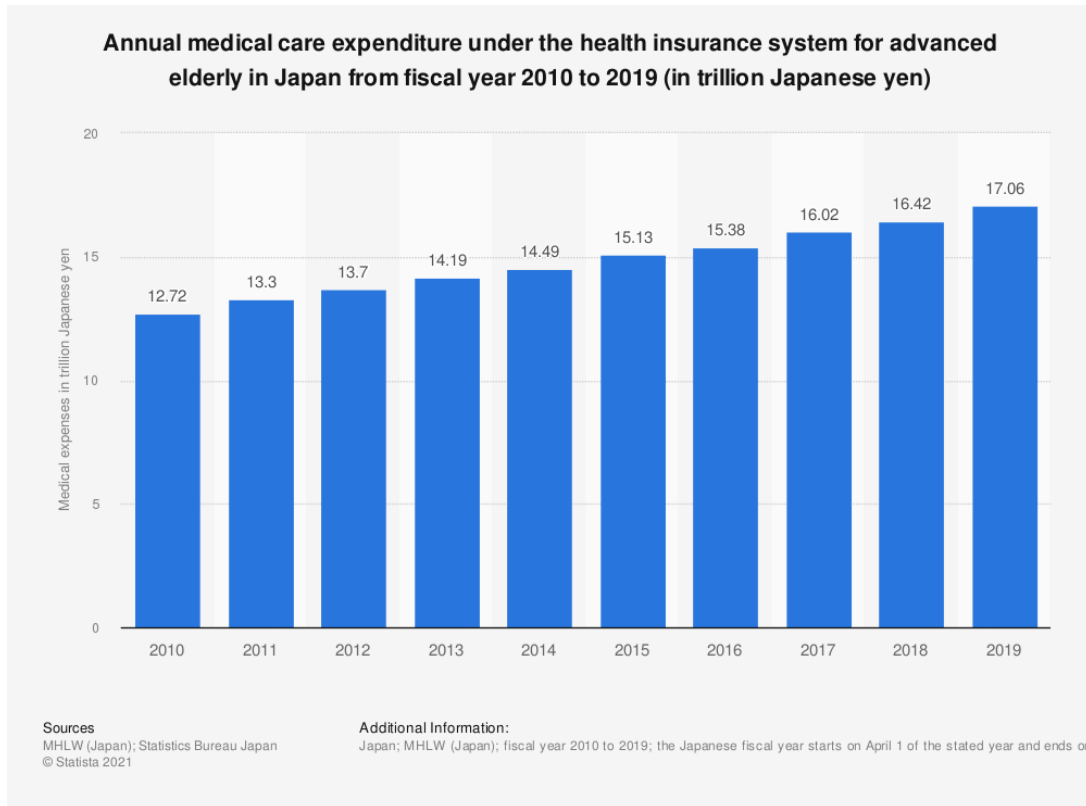
Senior Healthcare

Demi Yan,
Sharon Chen,
Lydia Zoe



Japan – World's highest life expectancy

Who pays?



Source: MHLW Japan, Statistics Bureau Japan

Issues:

- High proportion of expenses for the elderly
- Shrinking economy
- Pressure on health-workforce



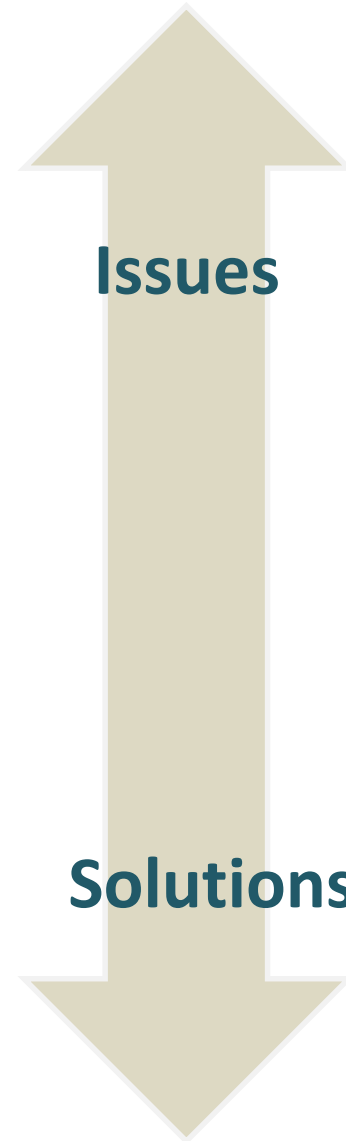
Solutions:

- Strengthen investment in preventive health care
- Increasing existing benefits
- Introducing more male staff or even elderly staff
- Encourage civil participation

Bangladesh

- Huge financial pressure
- Action leading by organizations
 - Health policy and administrative management
- ageing Research on the Edge

Avoid private sector participation
Healthcare Information Collection
Addressing the livelihood difficulties of the elderly



Nigeria

- Health policy and administrative management
 - Infectious disease control
 - Counterfeit Drugs
 - Retirement benefits

Avoid private sector participation
Need ageing ACT
Health insurance for the elderly
Addressing the livelihood difficulties of the elderly

Infrastructure & ageing Economies

Infrastructure for ageing in place

```
graph TD; A[Infrastructure for ageing in place] --> B[Culture and Community]; A --> C[Policies]; A --> D[Physical Env.]; A --> E[Healthcare];
```

Culture and
Community

Policies

Physical Env.

Healthcare

Infrastructure & ageing Economies

Current Challenges

Japan

- Shifting institutional landscapes to support active ageing
- Comparable to Denmark's Structural Reform

Bangladesh

- Cultural unwillingness for institutional care
- Lack of alternative financial support
- Social health challenge differences in urban and rural areas

Nigeria

- Marginalization of elderly residents and social isolation
- Lack of planning for retirement and poor management of pension schemes

Infrastructure & ageing Economies

What does this mean moving forward?

Japan

Bangladesh

Nigeria

- Pre-emptively directs resources to actively develop
- Gentoftte Model
- Direct Engagement

- Further comprehensive research
- How do socio-economic and physical wellbeing concerns affect social status in urban and rural areas?
- How effective will the UPS be?

- Reducing stigmas and discrimination of ageism
- Elderly-forward policy and pension systems



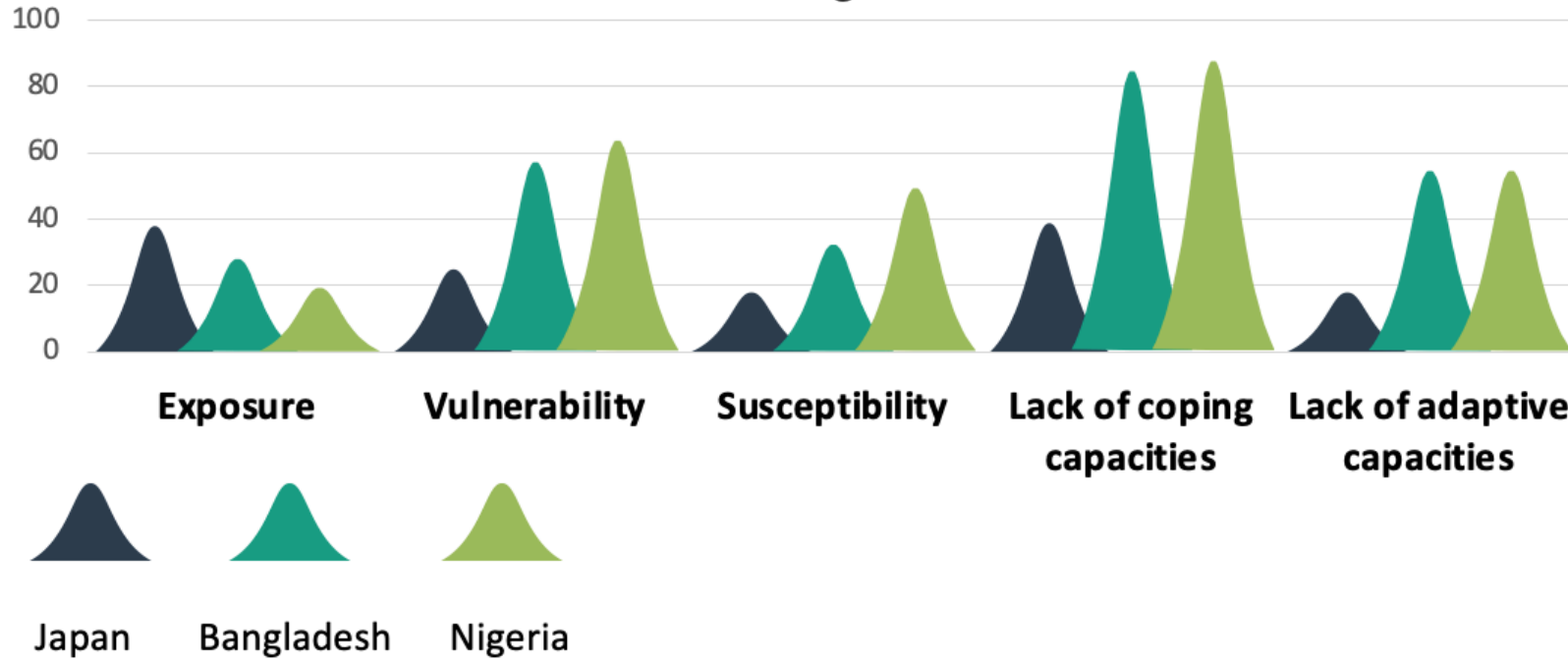
Climate Change and Healthcare

Why do we need to make climate change be
a part of the healthcare planning?

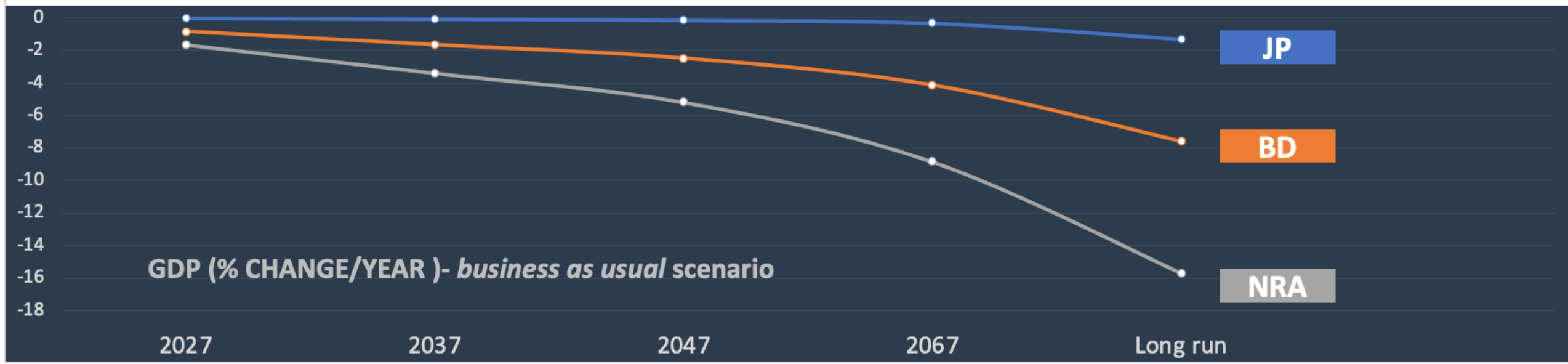
Brane Gradina



Climate Change Risk Index



- Cost of adaptation- **0.8%** of global GDP by the end of century
- Status quo- **6.6%** (3.9%-8.6%) of global GDP by the end of century



Climate change adaptation and healthcare system

Japan

- Centralized
- Good coordination
- Funded by the budget

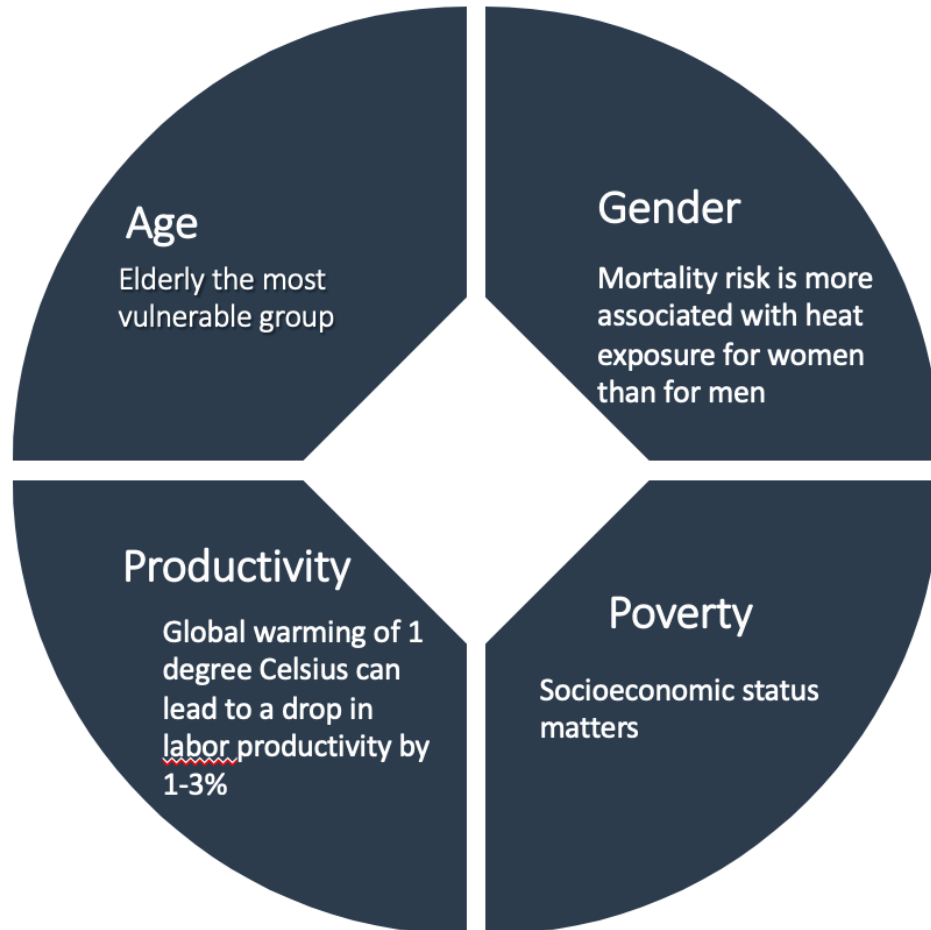
BANGLADESH

- Decentralized
- Low coordination
- Lack of funds

NIGERIA

- Decentralized
- No coordination
- Lack of funds

Heat: an issue multiplier



Policy suggestions

- 1** *Enhance community development practices, especially for marginalized and vulnerable groups.*
- 2** *Health adaptation plans for climate change should promote public participation, particularly among those most vulnerable and marginalized*
- 3** *Health in terms of climate change adaptation is a cross-sectional issue*



Conclusions



KEY TAKEAWAYS

Countries ageing at different rates but demographic challenge urgent for all

So...

Focus on longevity rather than ageing

By...

Enshrining longevity into economic, social, and environmental policy